

MODIS Science Data Support Team (SDST) Meeting Minutes 01/03/92

TENDEES: Phil Ardanuy RDC 982 3714
Lloyd Carpenter RDC 982-3708
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Harold Geller MCST/RDC 982-3740
Tom Goff RDC 982-3704
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Lalit Wanchoo STX 513 1682

XT MEETING: Date Time Building Room
Friday, January 10 10:00 am 22 G95

PICS:

CORRELATION IN POINTING ERRORS: Al Fleig needs a long arc of high resolution AVHRR data to study correlation in pointing errors with time.

SOFTWARE ENGINEERING TOOLS: The team should check on the set of software engineering tools available in Code 530 to see if any of these would be of use to the SDST. A Code 530 support contractor has established a correlation between the number of errors found in early stages of software testing with the number found in later stages. (If a large number of errors are found in unit testing, then one can also expect to find a large number of errors in integration testing, etc.)

SDST SOFTWARE: The SDST should begin developing guidelines for MODIS Science Team Members algorithms which are to be integrated on the MODIS TLMF. These guidelines must be concise (contained in no more than 8 to 10 pages). We must quantify the software requirements, stating what our procedure is for generating good code.

Tom Goff gave a progress report on porting SDST utility software to various computers, and the development of automatic documentation utilities. The SDST must develop, and consistently use, a standard prologue of identification information to be included as part of the internal documentation of all software.

Ed Masuoka was assigned the task of checking on the UCAR "copyright" as a sample for standardizing a software copyright statement for coding of MODIS SDST software. Part of the purpose is to avoid the situation where many different versions of the same algorithm leads to confusion and errors in the interpretation and use of processed data.

To ease in reading, following and understanding code, the internal documentation must be generous, and the naming of variables, modules, etc. must be clearly descriptive.

As a part of testing and TQM, we will need to do a structured walk through of all new or modified code. The code walk through is to be defined as the first step of testing.

The SDST must adopt a uniform file naming convention, state what it is, and use it consistently.

TEST DATA: Phil Ardanuy pointed out the importance of having test data which will stress the algorithms to reveal the behavior resulting in anomalies or unexpected situations in the data. The test plan should be developed concurrently with the algorithm development. Al Fleig emphasized the importance of having a good test plan, QC tools, guidelines for Team Members, guidelines for the SDST, developing metrics, quality and progress, and total quality management (TQM).

MODIS SDST FY92 WORK PLAN: Lloyd Carpenter presented an update on the use Microsoft Project together with samples of a few various standard reports available from The Microsoft Project software.

ACTION ITEMS:

30/91 [Lloyd Carpenter and Team]: Draft a schedule of work for the next 12 months. Include primary events and milestones, documents produced, software development, MAS support, etc. (The work Plan has been entered into Microsoft Project. Sample reports were included in the handout.) STATUS: Open. Due date 09/27/91.

06/91 [Liam Gumley]: Investigate a cataloguing scheme for the MAS data. Consider the Master Catalogue, PLDS and PCDS. STATUS: Open. Due date 02/14/92.

06/91 [Liam Gumley, Tom Goff, Ed Masuoka]: Develop a plan for storing and distributing MAS data. STATUS: Open. Due date 02/14/92.

03/92 [Ed Masuoka]: Check on the UCAR "copyright" as a first step in standardizing an SDST software copyright statement for copying. Check with legal. STATUS: Open. Due date 02/14/92.

03/92 [Team]: Get a "long arc" of high-resolution AVHRR data for study of time correlations of pointing errors. STATUS: Open. Due date 02/14/92.

03/92 [Team]: Check on the set of software engineering tools available in Code 530 to see if any of these would be of use to the SDS. STATUS: Open. Due date 02/14/92.